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10/536,817	05/27/2005	Jurgen Nowottnick	DE02 0289 US	6641
65913 NXP, B.V.	7590 10/05/2007	EXAMINER		
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SAN JOSE, CA 95131		2612		
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<u>,</u>		Application No.	Applicant(s)				
Office Action Summary							
		10/536,817	NOWOTTNICK, JURGEN				
		Examiner	Art Unit				
	The MAILING DATE of this communication app	Nabil H. Syed	2612				
Period fo	• • • • • • • • • • • • • • • • • • • •	bears on the cover sheet with the	correspondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING D. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. D period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be twill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. imely filed  m the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)🖂	1) Responsive to communication(s) filed on 27 May 2005.						
2a) <u></u> □	☐ This action is FINAL. 2b) ☐ This action is non-final.						
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-10 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.					
Applicat	ion Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 27 May 2005 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The specification is objected to be specification to the specification is objected to be specification.	accepted or b) $\square$ objected to drawing(s) be held in abeyance. S tion is required if the drawing(s) is c	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).				
Priority	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureat  See the attached detailed Office action for a list	ts have been received. ts have been received in Applica ority documents have been recei u (PCT Rule 17.2(a)).	ation No ved in this National Stage				
2)  Noti	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:					

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### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "17" in fig. 5 has been used to designate both "first delay element" in the base station and "second delay element" in the transponder. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 6, 8-10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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As of claim 6, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in Ex parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Ex parte Steigewald, 131 USPQ 74 (Bd. App. 1961); Ex parte Hall, 83 USPQ 38 (Bd. App. 1948); and Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 6 recites the broad recitation "at least one data carrier", and the claim also recites "at least one card" and "at least one chip card" which is the narrower statement of the range/limitation.

As of claim 8 also recite, the phrase "i.e." in line 6, renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 8 also recites, the phrase "at least one first decision-making unit that is connected downstream of the last stage of the first delay element signals to at least one control unit of the base station whether it is the delayed pulse (see method step [a.2]) or the pulse fed through the entire first delay element (see method step [b]) that arrives at

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the first decision-making unit first," is unclear. Because the delayed pulse is transmitted to the delay element at a different time than the pulse at the receiver unit (16b). Further explanation is required.

As of claim 9, the phrase "[e] a pulse that forms at least part of the data signal received from the base station is conveyed within the transponder station to at least one second delay element, [f] the pulse that forms at least part of the data signal received from the base station is also fed through the entire second delay element substantially at the same time," is unclear. Because the "at least one delay element" and "entire second delay element" is one unit not two different delay elements. Further explanation is required.

Regarding claim 10, the phrases "or the like" in line 4, and "such as", in line 5 render the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like" and "such as"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 10 is also objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim 10 has not been further treated on the merits.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 5, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Avenel (6,657,536).

As of claim 1, Avenel discloses an electronic communication system (via a vehicle access system; see abstract);

at least one base station (via a recognition device; see fig. 1) having at least one antenna (via a transmitting/receiving antenna 2) unit in particular in coil form, which base station is arranged in particular on or in an object to be secured against unauthorized use and/or against unauthorized access, such as on or in, say, a means of transport or on or in an access system (via storing the recognition device onboard a vehicle to allow or deny the access to the vehicle; see col. 6, lines 15-18) and-at least one transponder station (via an identifier; see fig. 2) in particular in data-carrier form, having at least one antenna unit —in particular in coil form (via having a transmitting/receiving antenna 21; see fig. 2). Avenel discloses that the identifier is carried by a person and is used as key to gain access to the vehicle (see col. 2, lines 15-24)

characterized in that

- there is arranged in the transponder station at least one delay element (via delay line 27; see fig. 2) for setting a defined, and in particular substantially constant, signal transit time within the transponder station (via delay line 27 outputting the signal received with a predetermined delay; see col. 8, lines 11-18);

However Avenel fails to explicitly disclose that the base station comprises a delay element.

As of claim 2, Avenel discloses that using different constants and filters causes the delay. Since the delay in Avenel is a function of the distance separating the recognition device from the identifier, the delay will be different at different time making the delay switch able (see col. 1, lines 43-59).

As of claim 5, Avenel discloses a transponder station (via identifier; see fig. 2) for an electronic communication system (see abstract);

Avenel discloses that the identifier comprises: a single transmitting/receiving antenna 21, which is connected to a reception terminal 23b and a transmitting terminal 23a; a control unit (via central control unit 24) which controls the functionality of the identifier; a delay element 27 for outputting the signal received with a predetermined delay (see fig. 2; also see col. 7, lines 62 through col. 8, lines 18).

As of claim 7, Avenel discloses a method of detecting and/or guarding against at least one, in particular external, attack;

characterized in that there are/is set

within the base station a defined, and in particular substantially constant, signal transit

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time (Avenel discloses that when the recognition device receives the first control signal from the transponder, it compares the rising edge of each pulse of the first control signal and the rising edge of each pulse of the detected envelope signal in and compares this time measurement with an initially stored time delay value; see col. 3, lines 60-67) within the transponder station a defined, and in particular substantially constant, signal transit time (via putting a delay in the transmission of the response signal by using a delay element; see col. 4, lines 58-63). Avenel discloses that the process detects the attack by measuring the time of both the signal received by the recognition device (base station) and the identifier (transponder) and measures the time against a threshold value to make sure if the response signal is received from a authorized identifier; see col. 4, lines 1-11).

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Avenel (6,657,536).

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As of claim 3, Avenel discloses all the limitation of the claimed invention but fails to disclose a decision making unit. However Avenel discloses that the central management unit 1 in the base station and central control unit 24 in the transponder perform the functionality of the decision-making unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Avenel to include a decision making unit, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same function s as before involves only routine skill in the art. In re Karlson, 136 USPQ 184.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Avenel (6,657,536) in view of Ellis (5,760,700).

As of claim 4, Avenel discloses a base station (via a recognition device; see fig. 1) for an electronic communication system characterized byat least one receiver unit (via receiver R; see fig. 1) for receiving the data signals (-24)
from the transponder (see col. 6, lines 15-18), which receiver unit is connected to the
antenna unit associated with the base station (via receiver R connected to the antenna
2; see fig. 1; also see col. 6, lines 15-18);
at least one control unit (via central management unit 1) in particular a microcontroller
unit, for controlling the base station (40-), which control unit is connected to the receiver
unit (via central management unit connected to the receiver R; see fig. 1; see col. 6,
lines 15-18)

at least one transmitter unit (via transmitter unit E; see fig. 1) for transmitting the data

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signals to the transponder station, which transmitter unit is connected to the antenna unit associated with the base station (via central management unit connected to the transmitter E; see fig. 1; see col. 6, lines 15-18).

Even though Avenel discloses having the delay time between the signal transmitted by the recognition device and the signal returned by the identifier, however Avenel fails to disclose a delay element inside the base station.

Ellis discloses a security system involved in the arming and disarming of a car alarm, including a transmitter (transponder) and a receiver (base station), wherein the receiver comprises a delay device 328 (see fig. 13, col. 10, lines 66 through col. 11, lines 1-21).

From the teaching of Ellis it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify system of Avenel to include a delay element in the base station as taught by Ellis in order to make a secure communication between the transponder and the base station and solve the problem of identities of the transponder and the base station being stolen (see Avenel, col. 1, lines 25-46).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Avenel (6.657,536) in view of Ott (US Pub 2002/0163419).

As of claim 6, Avenel discloses all the limitations of the claimed invention but fails to explicitly disclose that the transponder is a data carrier, a card and a chip card.

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Albert discloses an identification system for verifying the authorization to access a motor vehicle wherein the transmitter carried by the user is a ID card (see paragraph [0002]).

From the teaching of Albert it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the identifier of Avenel to use a chip card as a transponder as taught by Albert in order to have a replacement for mechanical key system (see paragraph [0002]).

#### Conclusion

The applicant is advised that during the course of examination, the claims are given their broadest, reasonable interpretation. As of claim 1, line 15, applicant recites the term "and/or" which is a broad limitation. For the purpose of examination it is assumed that only one limitation, the delay element inside the transponder *or* the delay element inside the base station is required to perform the functionality of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil H. Syed whose telephone number is 571-270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A. Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabil H Syed Examiner Art Unit 2612

N.S

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